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City of Milwaukee Health Department

CDC Issues New Guidelines for Interpreting and Managing Blood Lead Levels Less than 10µ/dL in Children

Within the past three-months, the U.S. Centers for Disease Control and Prevention (CDC) has endorsed new guidelines for use in the interpretation and management of child blood lead levels (BLLs) less than 10 micrograms per deciliter.

The CDC recommendation of 10 micrograms per deciliter as the established threshold for public health intervention in children dates back to 1991. The results of numerous studies conducted since 1991 up to the present day continue to provide increasing evidence of compromised physical and mental development in children with BLLs below 10 micrograms per deciliter. In response to those findings, a growing body of organizations and health professionals continue to urge CDC to lower its current numerical standard for "safe" BLLs. They argue that there really is no level of lead that can truly be considered "safe." The current CDC standard for the initiation of medical and environmental intervention in children remains at 10 micrograms per deciliter.

In response to the calls for change, the CDC appointed an Advisory Committee on Childhood Lead Poisoning Prevention to review its guidelines relative

On-Site Capillary Blood Lead Testing Information Kits Moving Fast, but Still Available

Informational packets about how to organize and conduct capillary blood collection for lead testing in physician offices, clinics, and other appropriate settings still remain available state-wide. Developed by the Targeting High Risk Populations for Blood Lead Testing Subcommittee, under the direction of the Wisconsin Childhood Lead Poisoning Elimination Plan Committee, the kit provides detailed information and requirements for the initiation of on-site testing in locations where blood lead samples are not currently being collected.

The initiation of on-site capillary blood lead collection provides an effective means to eliminate long-standing barriers to lead-testing children. It further promotes increased adherence to current lead testing recommendations and federal Medicaid requirements. Most importantly, it assures that eligible young children are not getting lost in the shuffle of missed opportunity with potential life-changing consequences for their future. The City of Milwaukee Health Department (MHD) continues to educate parents about the importance of having all children under the age of six lead tested. It relies on the full

and consistent support of the medical community to achieve this goal.

"Capillary Blood Collection for Lead Testing Information Kits" are available free of charge through the Wisconsin Department of Health and Family Services (DHFS) Childhood Lead Poisoning Prevention Program and the MHD's Childhood Lead Poisoning Prevention Program. The kit provides complete how-to information on all aspects of capillary blood collection including a copy of the U.S. Centers for Disease Control (CDC) video entitled "CDC Guidelines for Collecting and Handling Blood Lead Samples."

To request a free kit, call the Wisconsin DHFS Childhood Lead Poisoning Prevention Program (608) 266-5817, or the MHD Childhood Lead Poisoning Prevention Program at (414) 286-2197.

Published by the City of Milwaukee Health Department, the Milwaukee Healthy Homes: Healthy Children features in-depth information, data and reports of interest to the medical community from the Childhood Lead Poisoning Prevention, Asthma and Unintentional Injury Programs.

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Study Indicates Immigrant Children at Greater Risk of Lead Poisoning

A recent study published in the January 2008 issue of the American Journal of Public Health revealed that young children who had immigrated to New York City from foreign countries were at far greater risk for lead poisoning than children of similar age who were born and raised in the United States.

2005 – 2006 Wisconsin Immigrant Children Less than 6 Years Old Lead Testing Data				
GeoGroup	Time to First Test (from 2005-2006 Arrival Date)	Time to 2nd Test	Number of Children (based on time from 1st test to 2nd test)	
Africa 16 (5.1%)	Never Tested 6 (37.5%)			
	< 3 Months 10 (62.5%)	Not Tested Twice	5 (50.0%)	
		Within 3 Months	2 (20.0%)	
		3 - 6 Months	2 (20.0%)	
		More than 6 Months	1 (10.0%)	
	Never Tested 54 (15.9%)			
	< 3 Months 234 (69.0%)	Not Tested Twice	123 (52.6%)	
		Within 3 Months	53 (22.6%)	
		3 - 6 Months	10 (4.3%)	
		More than 6 Months	48 (2.1%)	
Southeast		Not Tested Twice	8 (47.0%)	
Asia 339 (93%)	3 - 6 Months 17 (5.0%)	Within 3 Months	6 (35.3%)	
		3 - 6 Months	0	
		More than 6 Months	3 (17.6%)	
	> 6 Months 34 (10.0%)	Not Tested Twice	18 (52.9%)	
		Within 3 Months	0	
		3 - 6 Months	2 (5.9%)	
		More than 6 Months	14 (41.2%)	
EurAsia	Never Tested 4 (66.7%)			
6 (1.9%)	< 3 Months 2 (33.3%)	Not Tested Twice	1 (50%)	
		More than 6 Months	1 (50%)	

Researchers cited a variety of reasons for the increased risk of lead poisoning among the immigrant children including the use of native products that often contain high levels of lead. In addition, standards with respect to lead regulation and lead poisoning prevention activities are lacking in some countries.

Also noted in the study was the fact that children who had lived outside of the United States more than six months prior to being lead tested were found to be 11 times more likely to have an elevated result than those children who had resided within the United States for a longer period of time. Countries noted as being at highest risk included the Dominican Republic, Haiti, Mexico, and Pakistan.

Wisconsin is no stranger to the influx of immigrants and refugee resettlement activity that continues to occur across the state. Accessing these populations for the purpose of addressing multiple health concerns including the need for blood lead testing poses a significant challenge in the public health arena. Figure 1 provides a breakdown of eligible Wisconsin immigrant children under the age of six from 2005-06, their countries of origin, the elapsed time prior to their first blood lead test, and the elapsed time until a second test was administered in cases where the need for confirmation and follow-up was indicated.

For more information on the New York City study, go to: www.ajph.org/cgi/content/abstract/98/1/92

Figure 1

New CDC Guidelines, cont.

to the medical management of BLLs below 10 micrograms per deciliter. This has resulted in newly revised guidelines that were released in November of 2007.

The revised guidelines were developed to serve as a resource for improving knowledge surrounding lead exposure, assisting physicians and other health professionals in better understanding BLLs below 10 micrograms per deciliter, and providing guidance in how to treat and monitor these types of BLLs in the most

effective way. In addition to addressing the interpretation and management of BLLs less than 10 micrograms per deciliter, the report, published in *Morbidity and Mortality Weekly*, also includes information on lead exposure risk assessment, strategies to prevent and reduce lead exposure in children, and a summary of recommendations for clinicians and government agencies.

To view the full report, go to: www.cdc.gov/mmwr/preview/mmwrhtml/rr5608a1.htm.

Environmental Medicine Case Study Modules Available to Primary Care Providers for Continuing Credit

Childhood is a time of rapid growth and development, accompanied by changes in organ system functioning, metabolic capabilities, physical size, and behavior that can dramatically modify potential illness caused by a toxicant. Children of all races and ethnic origins are at risk of lead toxicity throughout the United States. Lead may cause irreversible neurological damage in addition to other serious health consequences. Yet it is a wholly preventable disease. Pediatricians and other child health care providers need to develop and maintain the expertise to take a thorough environmental history from their patients, deliver anticipatory guidance, and conduct appropriate risk-based laboratory tests for environmental illnesses.

The U.S. Department of Health and Human Services Agency for Toxic Substances and Disease Registry (ATSDR) offers a self-study program to primary care providers called Case Studies in Environmental Medicine (CSEM). The CSEM are a series of self-instructional publications designed to increase the primary care

provider's knowledge of hazardous substances in the environment and to aid in the evaluation of potentially exposed patients.

Two versions of the Lead Toxicity CSEM are available. The HTML version found at http://www.atsdr.cdc.gov/csem/lead/ provides content through the Internet.

The downloadable PDF version provides content in an electronic, printable format, especially for those who may lack adequate Internet service.

Continuing medical education credits, continuing nursing education units, and continuing education units are offered by the ATSDR in support of this series. Continuing education unit information can be found at www2.cdc.gov/atsdrce/ or by contacting the Continuing Education Coordinator at the following address: ATSDR, Division of Toxicology and Environmental Medicine; 1600 Clifton Road, NE (MS F-32); Atlanta, GA 30333; Telephone (770) 488-3490; FAX: (770) 488-4178; e-mail: atsdrdtemce@cdc.gov

Fight Asthma Milwaukee Allies (FAMAllies) Provides Community and Professional Education Classes

Asthma is the most common chronic disease of childhood. It keeps kids home from school and parents home from work. Asthma represents a serious health concern and can prove to be a frightening experience for unsuspecting kids and their families, who in many cases are lacking in their overall understanding of this increasingly common disease.

Fight Asthma Milwaukee Allies, an affiliate organization of Milwaukee Children's Hospital and Health System, announces **Catch Your Breath 2008.** This series of asthma education classes is designed to assist the general public and area health professionals with increasing their understanding of the disease, developing and enhancing asthma treatment knowledge, and adopting sound strategies for achieving and maintaining effective asthma control.

Health professionals are encouraged to share the following community asthma education class information with their clients and professional colleagues:

Intro to Asthma

- For students of nursing, respiratory therapy and other health professions
- A FREE community education class to help caregivers better manage asthma
- Intro to Asthma teaches students of various health professions about asthma management basics, common
 myths and community misunderstandings about asthma, and strategies for teaching asthma management to
 patients and families.

Date: Wed., Oct. 8, 6-8 pm

Place: Children's Health Education Center 1533 N. River Center Dr., Milw.

Sign-up: Nicole Hosni at (414) 765-9355 or NHosni@chw.org.

Catch Your Breath - Asthma Survival Skills For Parents and Children

- · A FREE, 2-hour class, offered every month, that helps parents and children learn to manage asthma.
- Fight Asthma Milwaukee Allies can customize this class for community groups and provide a speaker to teach at any location.
- The class can also be presented in Spanish.

Dates: Tues., June 10*, Wed., Sept. 10*, Tues., Oct. 14 ** 6 – 8 pm
Place: *Children's Health Education Center 1533 N. River Center Dr., Milw.

** Children's Hospital Corporate Center 999 N. 92nd St., Suite 255, Wauwatosa

Sign-up: To register call (414) 765-9355

Asthma Care at Child Care

A FREE program for Child Care providers and users on:

- · Asthma basics: What is asthma?
- The early warning signs of asthma
- How to care for a child in the early stages
- Common asthma triggers

- Making your child care center asthma friendly
- How to use spacers, inhalers and nebulizers
- What to know about asthma medications
- Questions to ask parents of children with asthma

Dates: Sat., Sept. 20, Sat., Nov. 1 9 – 11:30 am

Place: Children's Health Education Center 1533 N. River Center Dr., Milw. Space is limited, register early! Snacks and beverages will be provided.

HOME ENVIRONMENTAL HEALTH RESOURCES

City of Milwaukee Health Department	(/1 /) 005 I EAD [005 5000]
Fight Asthma Milwaukee Allies	www.famallies.org (414) 765-9355
State Department of Health and Family Services (DHFS)	www.dhfs.wi.gov/lead (608) 266-0197
U.S. Environmental Protection Agency (EPA)	www.epa.gov 1-800-424-5323
Centers for Disease Control and Prevention (CDC) Standards for Health Risk, Screening Recommendations, Asthma, Lead Poisoning Prevention Program and Injury Information	www.cdc.gov (414) 639-3311
National Center for Healthy Housing	(410) 992-0712
Environmental Health Watch	www.ehw.org

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